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Unmet need for contraception among human immunodeficiency virus-positive women in Jos, Nigeria: A call to integrate family planning and human immunodeficiency virus services

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Abstract:

PURPOSE: In the prevention of mother-to-child transmission (PMTCT) of human immunodeficiency virus (HIV), contraception is one of the four strategies proposed by the World Health Organization. Closing the gaps of unmet need for contraception among people living with HIV (PLHIVs) is critical, especially for Nigeria which contributes about 30% of global PMTCT burden. We assessed contraceptive utilization and needs, partner support, and planning of pregnancies among female PLHIVs receiving care at the HIV Treatment Centre of Jos University Teaching Hospital (JUTH).

MATERIALS AND METHODS: Structured questionnaires were administered to 350 postpartum women attending the PMTCT Unit of HIV Clinic of the JUTH in 2009 using a convenience sampling method. This was to access their knowledge and utilization of contraception. All were receiving PMTCT follow-up and were within 18 months postpartum. The data were analyzed with the Epi Info Statistical Package version 3.3.

RESULTS: The participants' ages ranged 19–44 years and 81.4% were Christians. Most (36.1%) were homemakers and 87.1% were married. About 44.1% were discovered to be HIV positive during antenatal care, and 47.6% of husbands were HIV positive. The previous pregnancies had been planned in 38%, thus 62% of preceding pregnancies were unplanned, while 33.8% did not desire more children. Contraception awareness was high (84.5%) but 87.1% of the participants used no form of female contraception and 81.4% admitted regular sexual activity. Among those who did not desire more pregnancies, only 48.4% used modern female contraception. Majority (80.7%) of the respondents indicated that family planning (FP) would be easily accessed in the HIV clinic while male partners (49.4%) encouraged contraception.

CONCLUSION: Among PLHIVs in northern Nigeria, there is a high rate of unintended pregnancy, and high contraceptive awareness did not translate into usage. Integration of HIV and reproductive health services holds potential to improve FP access and usage by PLHIVs.

Keywords:

Contraception, integration, prevention of mother-to-child transmission, unmet need, unplanned pregnancy

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Introduction

Nigeria is the most populous nation in sub-Saharan Africa (SSA) which accommodates two-thirds of the global human immunodeficiency virus (HIV) disease burden.[1] Since 2001, HIV

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prevalence hovered around 5%[2,3] with antenatal care (ANC) survey report of 2010 prevalence of 4.1% - a critical threshold in any epidemic where escalation to 40% can occur if left unchecked.[3] Although a declining trend of HIV prevalence among ANC attendees has been documented in North Central Nigeria,[4] the pool of HIV-positive women of reproductive age continues to grow.

It is known that not <57% of people living with HIV (PLHIVs) are women, and the highest age bracket is within 20–24 years.[5] Globally, about 100,000 HIV-infected infants are born yearly and mother-to-child transmission (MTCT) contributes 10% of the new infections. About 1.2 million children have been orphaned in Nigeria; the highest for any country.[6] New pediatric infections had reduced by over 50% in many African countries but remains unchanged in Nigeria[7] and this has been attributed to several reasons. In the Prevention of MTCT (PMTCT), a comprehensive four-pronged strategy to prevent pediatric infections has been agreed upon, including primary prevention of HIV and prevention of unintended pregnancies among PLHIVs with effective contraception, which is the least practiced of the four prongs.[5,8] Many women lack information in regard to HIV, pregnancy, and sexual/reproductive health (SRH) care.[6] The total fertility rate remains high (5.7) while modern contraceptive prevalence rate is 10%, 20% of women who express desires to limit/space pregnancy are not using contraception. The Nigerian Demographic Health Survey (NDHS) indicates that approximately 21% of 15–19-year-old women have given birth.

Family planning (FP) is not a budget item for the Government of Nigeria, and there are chronic shortages at health facilities. Integrating it with PMTCT is a component of Maternal Neonatal and Child Health that will increase utilization and access.[9]

Over 222 million women worldwide experience unmet contraception needs,[10,11] and in SSA, there are one in four women and this is worse among female PLHIVs. Improving the access reduces unintended pregnancies, maternal deaths, and new pediatric HIV infections. These figures are high in SSA,[12] and health services are to provide PLHIV couples comprehensive and easily accessible FP services to avoid unplanned pregnancy including dual protection,[13] and donors should provide support.[14]

Materials and Methods

Setting and participants

The Jos University Teaching Hospital (JUTH) provides comprehensive HIV services to over 12,000 PLHIVs, and about 60% of them are females most within the reproductive age group. After delivery, the mother–infant pairs continue PMTCT follow-up. The obstetricians provide care and treatment to mothers, while pediatricians and counselors provide infant growth monitoring and early infant diagnosis (EID) to infants at the same sitting and this makes infant follow-up easier.

The target group were women who had delivered within the previous 18 months and were receiving PMTCT services for mother–infant pairs at the JUTH PMTCT clinic. These women were within the reproductive age group, likely to be sexually active and brought their infants for PMTCT/EID follow-up. Structured questionnaires were developed capturing the biodata, knowledge of positivity, and the number of previous pregnancies and planned pregnancies among others to access. The information of desire for more children, sexual activity and contraceptive awareness, and those who did not desire more children among others were requested. The clinical staff had been trained and provided information about this study during the health talk in local languages the patients can understand (Hausa, Pidgin English, Tiv, and English). They invited women who were willing to be recruited into the study after they provided consent.

Data collection

The structured questionnaires were pretested at a primary health care center in Jos and thereafter administered to 350 postpartum PLHIVs in this cross-sectional study. A convenience sampling technique was used, and women who indicated interest in filling the questionnaires were recruited after the awareness talk. Health worker interpreters were provided orientation and helped to administer the questions to non-English speaking women.

Data analysis

The data were collated and analyzed with the Epi Info Statistical Package (epiinf35.v01 CDC www.cdc.gov/epiinfo) using frequencies.

Results

The ages of the women ranged from 19 to 44 years, with 81.4% of Christians and 18.6% of Muslims. Majority (36.1%) were homemakers and 87.1% were married. No education and informal education featured in 4.9% each, while 20.1% possessed primary education, 35.5% had secondary, and 34.4% had tertiary education [See Table 1].

The duration of knowledge of HIV positivity ranged few months to years, but 44.1% were discovered positive

Table 1: Biodata of female respondents on unmet need for contraception

Variables	Frequency	Percentage
Age (years)		
Adolescents (10-19)	18	5.14
20-29	158	45.1
30-39	135	38.6
40-49	38	10.86
>50	1	0.3
Marital status		
Married	305	87.1
Widowed/separated	49	12.9
Education		
None	17	4.9
Informal	17	4.9
Primary	70	20.1
Secondary	124	35.5
Tertiary	121	34.4
Occupation		
Homemakers	126	36.1
Applicants/other professions	224	63.9
Religion		
Christians	285	84.4
Muslims	65	18.6
Previous pregnancies		
Para 0 (1 previous)	67	19.3
Para 1 (2 previous)	83	23.6
Para 2 (3 previous)	76	21.6
>Para 3 (>3 previous)	124	35.5
Tested HIV positive		
At the last confinement (positive <1 year)	155	44
Referred from ART clinic (positive >1 year)	195	56
Husband's HIV status		
Positive	167	47.6
Negative	85	24.4
Unknown	98	28.1

ART: Antiretroviral treatment, HIV: Human immunodeficiency virus

within the previous year during the preceding ANC period. Spouses were positive in 47.6%, negative in 24.4%, and unknown status in 28.1%. Previous pregnancies ranged 1–10, with 19.3% having had 1 previous, 23.6% had 2 previous, and 21.6% had 3 previous pregnancies [See Table 2]. The living children range was 0–9 per woman, with 206 (59.1%) of the women having between 1 and 2 alive, children that died were 0–6 per woman, with 113 women (32.4%) having lost 1 child previously from various causes.

The preceding pregnancy had been planned in 38% of the respondents, thus unplanned in 62% of the respondents. Some 81.4% indicated regular sexual activities while the rest alleged occasional episodes. Contraception awareness was found to be high in 84.5% but 87.1% of the respondents used no form of modern female contraception, 4% used some methods occasionally, while 8.9% indicated consistent use, with the injectable being the most preferred method. The injections were used by 54.2% (26) of those who utilized female contraception. However, 37% of the respondents indicated their husbands/spouses always wore condoms, 34.7% indicated occasional use, while 28.3% of spouses never wore condoms.

It was noted that 33.8% of the respondents also indicated they did not desire any more children but only 48.4% of this group always utilized contraception consistently. Inquiries were made to access the need for contraception among this group who indicated that they were not desirous of more children, and of them, those who indicating they desired a method of contraception were 52.2% while the remaining 47.8% said that they had no desire for FP methods or referral. Some 72% women had visited FP clinic previously, among which 30.5% disclosed their HIV status. Majority of those who indicated their status (92.7%) said that they were not stigmatized or discriminated against by the staff at the clinic.

Spouses encouraged FP for the women in 49.4% of the respondents and 52.2% of the women requested FP clinic referrals. About 80.7% of the respondents indicated that FP will be easier to assess and utilize if offered at the HIV clinic.

Discussion

This study revealed the major gaps in the SRH of this group of high-risk women and revealed the unmet needs for contraception of 51.6% of the women who required spacing/limitation of family size. Preceding pregnancies had been planned in 62% of the respondents. The study also showed that correct consistent condom use is still low in HIV-positive couples and this is so in serodiscordant relationships and relationships where spouse status is unknown. High parity rates also abound among HIV-positive women even when they have no more desire for children.

These findings are much higher than found in other studies in other parts of Africa. In the study that examined unmet need for contraception among 318 Kenyan female PLHIVs aged 15–49 years, it was found that 18% experienced some level of unmet need for contraception.[15]

However, when this study findings were compared with a large quantitative study conducted in 18 clinics in Kenya, Tanzania, and Namibia, which recruited 1992 women and 1483 men, all PLHIV, sexually active, <50 years with an average of 2 children each, it was observed that 86% of the women and 78% of the men

Table 2: Variables providing information about access and utilization of contraception

Variables	Frequency	Percentage
Those who had planned preceding pregnancy		
Planned	133	38
Unplanned	217	62
Current sexual activity		
Regular	285	81.4
Sometimes	32	9.2
Abstinent after birth	33	9.4
Desire for children		
Desire more	218	62.2
Do not desire more	132	37.8
Awareness of contraception		
Aware of modern methods	296	84.6
Not aware	54	15
Utilization of female contraceptives		
None at all	305	87.1
Occasional use	14	4
Regular use	31	8.9
Utilization of male condoms (spouse)		
Never use	99	28.3
Sometimes use	121	34.7
Always use	130	37
Contraception use among those who did not want more children (*n*=132)		
Always use	64	48.4
Sometimes or never use	68	51.6
Need for contraception among nonutilizers (*n*=305)		
Desired a method	159	52.2
Did not indicate need for a method	146	47.8
Past utilization of FP clinic		
Visited at some time past	252	72
Never visited FP clinic	98	28
Disclosure of HIV status at FP clinic visit (*n*=252)		
Disclosed HIV positive status	77	30.5
Did not disclose positive status	175	69.5
Stigmatization at FP clinic of those who disclosed status (*n*=77)		
No stigma experienced from health workers	71	92.7
Experienced stigma	6	7.3
Husband/spouse encouraged/supported contraceptive utilization		
Supported	173	49.4
No support	177	50.6
Request for FP referrals		
Requested referrals	183	52.2
Did not request	167	47.7
Preference for ease of access of FP services		
Access preferred at the HIV clinic	282	80.7
Fine with access at the hospital FP clinic	62	19.3

HIV: Human immunodeficiency virus, FP: Family planning

do not desire another child within 6 months but only 30% of women in Kenya, 44% in Namibia, and 14% in Tanzania were able to use effective contraception. This means unmet needs of 70% in Kenya, 56% in Namibia and 86% in Tanzania. The overall unmet need is 71%, which is higher than the 51.6% obtained in this study, but similar to that in Namibia (56%).[16] It is also higher in this study than in Lesotho, where HIV prevalence rate for women is 26.4%.[17] About 30% of women who did not want to get pregnant reported dual protection, while 12% used no method at all, 14% used various types of none barrier modern family planning methods, and 44% reported using only condoms.

This study in Jos showed that 84.6% of the respondents are aware of FP. The Nigerian National NDHS indicates high FP awareness in Nigeria, but the unmet need for

modern contraception remains high. Thus, there may be other barriers to access.

This study revealed that 37% of males utilized condoms at every act of coitus. In comparison with the Kenya, Tanzania, and Namibia studies, considering men not hoping to get their partner pregnant, 18% reported dual protection; 7% methods such as using pills or injections; and 73% condom use only, with seven of ten women assessed to have unmet contraception needs. Many researchers observe that condom use may be overreported, thus unmet need for contraception may be much higher. Approximately 72% indicated that they utilized FP clinic. In the studies in Kenya, Namibia, and Tanzania, 46% of women had this discussion but 28% of men did the same. This male involvement is low in Nigeria where most FP clinics are visited by women.[18]

About 50.6% of the spouses did not support contraception for them. This association between male partner opposition to contraception and unmet need was observed among women seeking HIV services in Cross-River State, Nigeria, where perceived partner opposition to FP was ≥70%.[19] This indicates the need to involve men in FP issues for improved access and utilization.

This study yielded more findings because women who recently had children were interviewed as these were an indication of recent or ongoing sexual activity. Inquiries were also made about partner's role in contraception utilization and accessibility of the nonintegrated FP clinic which was located away from the HIV clinic in this setting. In addition, the health workers with whom the clients were familiar were the ones who administered the questionnaires to them and this was done in the HIV clinic and at the time the women had come for follow-up. This added strength to this study.

The reasons for which people do not utilize modern contraception are known to be side effects of contraceptives, infrequent sex, breastfeeding, partner opposition, high cost, and unawareness of methods.[20] These were not fully assessed in this study and posed a limitation, however inquiries were made about acceptability of the distance of the FP clinic, and most of the respondents complained that the FP clinic had closed before they concluded with the HIV clinic. The study also revealed a high level of unprotected sex, even among the serodiscordant couples. A total of 81.9% of the participants alluded to regular sexual activity but still did not utilize contraception. Access to effective contraceptive methods and counseling for particularly female PLHIVs must improve preferably by the integration of RH services.[21]

The findings from this study imply that optimizing health resources and doing more with less resources is essential across all sectors in the face of diminishing donor budgets. It is known that integration, the incorporation of two or more services as one coordinated combined service, is a powerful vehicle, and combining multiple health services (HIV, FP) introduces a more holistic approach to better health and well-being,[22] with the provider actively encouraging clients to consider using the other services during the same visit.

There should be policies to indicate that integration should therefore be utilized in implementing HIV and RH services including FP. The proposed models have to be explored in our low-resource countries where the biggest gaps exist. Level 1 provides FP assessment, counseling, condoms, oral contraceptive pills, and emergency contraception. Level 2 adds injectable contraceptives to level 1 service. Level 3 includes intrauterine devices and implants to level 2 services, while level 4 provides all contraceptive methods including permanent/surgical methods. Levels 1 and 2 can be provided at same sitting with HIV services by the same personnel and will bridge gaps associated with knowledge, attitude, and assess.[23]

For sustainability, engagement of critical stakeholders in RH, training of health workers, strengthening logistics and monitoring and evaluation systems, and provision of supportive supervision are critical.[24,25]

Policies can be formulated to ensure that FP services are integrated into HIV counseling and testing, behavioral change communications, youth RH services, infertility, male services, PMTCT, and treatment/care services.[26,27] Integration improves client satisfaction and access to component services and reduces stigma and this can be further researched in HIV treatment and care settings. Placing FP at the forefront of efforts to prevent sexually transmitted infections/HIV transmission is logical and must be utilized maximally, especially in resource-constrained environments. Delivering these services in parallel represents missed opportunities that may weaken the effectiveness/quality of programs and stall progress toward achieving key health outcomes. Evidence base and guidance of documents/tools for effective FP/HIV integration now abound,[28] and health systems strengthening demand creation, referrals, and linkages should be put in place.[29]

Conclusion

High unmet needs, multiple unplanned pregnancies, and low uptake of long-term methods abound among PLHIVs. Nonintegration of FP/HIV appears contributory and considering that women of childbearing age account

for nearly half of the 34 million PLHIVs, there is an urgent need for strategies for FP/HIV integration in Nigeria to ensure the quality of care to PLHIVs and efficient utilization of scarce resources.[10,30] As a result of these findings, the JUTH HIV and FP/SRH teams collaborated and integrated FP services in the HIV clinic, and female PLHIVs now access HIV care, levels 1 and 2 FP, and Pap smear at the same point, while Level 3 and 4 FP services are provided by referral.

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Conflicts of interest

There are no conflicts of interest.

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